



**UNITED STATES DEPARTMENT OF COMMERCE**  
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/858,586 05/19/97 COWIESON

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EXAMINER

HARVEY, M

ART UNIT

PAPER NUMBER

2747

DATE MAILED:

01/14/00

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
08/858,586

Applicant(s)

COWIESON et al

Examiner  
Minsun Oh Harvey

Group Art Unit  
2747



☒ Responsive to communication(s) filed on Oct 20, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 1-79 is/are pending in the application

Of the above, claim(s) 15, 22, 26, 31, 44-54, and 73-75 is/are withdrawn from consideration

☒ Claim(s) 69-72 is/are allowed.

☒ Claim(s) 1, 5-14, 16-18, 23-25, 27-29, 34, 55, 62, and 76-79 is/are rejected.

☒ Claim(s) 2-4, 19-21, 30, 32, 33, 35-43, 56-61, and 63-68 is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s) \_\_\_\_\_

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 9, 10, 13, 18, 27, 28, 55 and 62 are rejected under 35 U.S.C. 102(b) as being anticipated by Kim.

Kim discloses a system for accepting a set of  $n$  input signals (FL, FR, RL, and RR of fig. 4) for presentation to  $x$  speakers (EL and ER), where  $x$  is any number, the system comprising: means for expanding in pairs certain of the signals for presentation to the  $x$  speakers (45 and 46); means for expanding in pairs others of the input signals for presentation to the  $x$  speakers (47 and 48); means when  $x$  is less than  $n$  for summing the expanded signal pairs for presentation to the  $x$  speakers (summers that output EL and ER).

3. Claims 5, 6, 7, 8, 11, 12, 14, 16, 17, 23, 24, 25, 29, 34, 76, 77, 78 and 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim.

Kim does not disclose that at least one of the expanding means includes a QX filter, OMNI23D filter, a pair of Q1 filters, a 123D circuit and a QX dual filter. Even though Kim does not explicitly disclose that filters 45 to 48 could be QX, OMNI23D, a pair of Q1, a 123D and QX dual filters, it would have been obvious to have the filters 45 to 48 of Kim substituted with the

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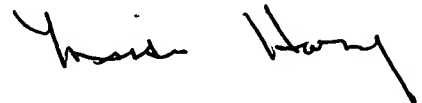
different kinds of filters as claimed because different devices could be used for providing an expanded sound images.

4. Claims 2 to 4, 19 to 21, 30 to 33, 35 to 43, 56 to 61 and 63 to 68 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claims 69 to 72 are allowable over prior art of record.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lowe, Ten Kate, Scheiber and Sekine discloses a system for converting input signals which are for presentation to speakers.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minsun Oh Harvey whose telephone number is (703) 308-6741



**MINSUN OH HARVEY**  
**PRIMARY EXAMINER**

January 3, 2000